**Portland Evening Scholars 2009-2010**

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| **Course:** Geometry 1 | | **School:** Portland Evening Scholars | |
| **Instructor:** Ameena Amdahl-Mason | | **Contact information:** [aamdahlm@pps.k12.or.us](mailto:aamdahlm@pps.k12.or.us)  Through the Portland Evening Scholars office at 503-916-5720 | |
| **Subject:** Mathematics | **Days of the week offered:** Thursday | | **Hours offered:** 6-9pm |
| **Course Description**  Geometry focuses on the fundamentals of Euclidean geometry, using a transformational approach. This course includes the study of reflections, translations, rotations, and glide reflections, relationships between figures, properties and measurement of plane figures, measurement of three-dimensional figures, tools for analyzing and measuring shapes, investigation and proof, geometric construction, probability, and a review of algebra concepts. | | | |
| **Content Standards Addressed:**   * H.1G.1 Identify, apply, and analyze angle relationships among two or more lines and a transversal to determine if lines are parallel, perpendicular, or neither. (Chapter 2) * H.1G.2 Apply theorems, properties, and definitions to determine, identify, and justify congruency or similarity of triangles and to classify quadrilaterals. (Chapter 2, Chapter 3) * H.1G.3 Apply theorems of corresponding parts of congruent and similar figures to determine missing sides and angles of polygons. (Chapter 3) * H.1G.4 Determine the missing dimensions, angles, or area of regular polygons, quadrilaterals, triangles, circles, composite shapes, and shaded regions. (Chapter 2) * H.1G.5 Determine if three given lengths form a triangle. If the given lengths form a triangle, classify it as acute, right, or obtuse. (Chapter 2, Chapter 5) * H.1G.6 Use trigonometric ratios (sine, cosine and tangent) and the Pythagorean Theorem to solve for unknown lengths in right triangles. (Chapter 2, Chapter 4, Chapter 5) * H.2S.1 Identify, analyze, and use experimental and theoretical probability to estimate and calculate the probability of simple events. (Chapter 1, Chapter 4) * H.2S.2 Determine the sample space of simple events. (Chapter 4) * H.2S.3 Compute and interpret probabilities for independent, dependent, complementary, and compound events using various methods (e.g., diagrams, tables, area models, and counting techniques) (Chapter 4) * H.3G.1 Recognize and identify line and rotational symmetry of two-dimensional figures. (Chapter 1) * H.3G.2 Identify and perform single and composite transformations of geometric figures, in a plane, including translations, origin-centered dilations, reflections across either axis or y=±x, and rotations about the origin in multiples of 90°. (Chapter 1, Chapter 3) * H.3G.3 Apply a scale factor to determine similar two- and three-dimensional figures, are similar. Compare and compute their respective areas and volumes of similar figures. (Chapter 3) | | | |
| **References, text(s), resources:**   * Geometry Connections (College Preparatory Mathematics) * Additional supplements as necessary (including internet resources) | | | |
| **Assessment/evaluation/grading policy/late work policy:**   * Individual and group work = 50%   Individual and group work will be corrected together in class, and points will be awarded for both completion and correctness.   * Assessments (tests, quizzes, projects) = 50%   Assessments will measure the previously mentioned content standards to determine student proficiency. These assessments will be graded on proficiency, not effort.   * Work is due the week after it is assigned. All work must be turned in by the time of the chapter test for each chapter. Any work turned in after that point will only receive 50% credit or less. | | | |
| **Behavioral Expectations:**   * Students are expected to be on time and attend regularly, following Evening Scholars guidelines. * Students are expected to come prepared. This includes bringing the following every day: pencils, paper, homework, calculator, textbook (if one has been checked out), and other materials as needed. * Students may not use cell phones, iPods, mp3 players, or handheld video games in class. * Students are expected to be respectful towards their teacher, their classmates, their materials, and themselves. They should expect the same respect from their teacher and classmates. * Students are expected to ask for help when they need it and are expected to seek extra help, if necessary. Tutoring is available at Evenings Scholars, Monday through Thursday, 5pm – 9pm. * Much of Geometry is predicated on group work. Students are expected to give each student an opportunity to express his or her opinions and ideas, and should not seek to dominate group work, or expect their group members to do all the work. * Students are expected to turn their work in on time. If there are extenuating circumstances, students should let Ameena know as soon as possible. * Students are expected to follow all rules and policies set out by Evening Scholars and Portland Public Schools. | | | |
| **Safety issues and requirements:**   * Students must demonstrate respect for one another, their teacher, and school property. * Students must follow all safety guidelines laid out by Evening Scholars and Portland Public Schools. | | | |
| **Effective date of syllabus:** February 2010-June 2010 | | **School year:** 2009-2010 | |
| **Schedule of topics/units covered:** | | | |
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| **Student Accommodation(s) and support available:**   * Tutoring * extended time for testing * alternative form of test * extended work time for assignments * preferential seating * other accommodations based on a student’s IEP or 504 plan, or upon request | | | |